

TCATCATCTTCTCAATTCAACCTAAACCTCCTCCGCTACTATAACTCAATCACCTTCGGTCTC 70
 TCACCGATGATAAACCCCTCTTGTGAACGTGAAAGGTGTTACCGATGTTTGCTTACCCCTGGGATGATGT 140
 ATTCAATCAAGCTCTTACTCGTCTAATCATAGAAATGTTCTCGACATGAACAAGGGGTT 210
 TCGCTGCTGAAGGCTACGGCTCGTGTACTGGACGGTGGAGTTGTATTGCACTCTGGTCCAGGTGC 350
 TACTAATCTTGTGTTCTGGCTTCTGCTGATGCCACTGTCAGTCCCCTCTGCGCATTACTGGCAA 420
 GTTCCCCGGGATGATTGGTACTGTGTTCAAGAGACTCCAATTGGTAGGTAACCTGATCCATT 490
 CCAAGCATAATTATTGGGTTAGATGTTGAGGATATTCTCTAGAAATTGTTAACGAAAGCTTCTTTTAC 560
 TAATTCTGGTAGACCTGGACCTGGTACTGTGTTGATTGATATTCTAAAGATAATTAGTTGTTCCT 630
 AATTGGGAACAGCCCCATTAAATTGGTGGGATCTTAGTTCTAGGTGCTAAACCCACTTCTGCTAATG 700
 AAGAGGGACTCTTGATCAAATTGTAAGGTTAGTGGGTGAGGCTAAGAGACCTGGCTGCTGATACTGGACG 770
 TGGGTGTTGAATTCTAGTGAAAGAAATTGAGGAATTGGAAATTCTCGAATTGACAGGTATTCCGGCTGGCTAGTACT 840
 TTAATGGGGTTGGGGCTTCCCTTGTACTGATGATTATCTCTCATATGTTGGAAATGGCAGGGACTG 910
 TGTACGGAAATTACGGCGCTTGTAAAGGCCGATTGTTGCTAGCCGGCTAAGTGGCATTACAGGGGTTGAATAAGA 980
 GACTGGTAAGCTCGAGGGCTTGTGCTAGCCGGCTAAGATGTCACATCGATTCTGCTCAAATC 1050
 GGGAAAGATAAGCAACCTCATGTTGCGATTGGTGAITGTTAAAGTGGCATTACAGGGGTTGAATAAGA 1120
 TTTTGGAACTCTAGAAAAGGAAGGTGAATTGGATTCTCTAATTGGAGGGAGGTGAATGAGCAGAA 1190
 AAAGGAAGTTCCTTTGAGTTTAAGACTTTCGGGGATGCAATTCCGCAATTACGCCATTTCAGGTCTT 1260
 GACGAGTTGACGAAGGGCATTGGCTGTAACTACTGCTGTTGGGTGGTTGGTAGACATTGATGGGGATGGAGTTT 1330
 TCTATAAGTACCGAAATCTGCCATTGGCTGACCTCGGGGATGGCTGTTGGGTGGTTGGTAGAGAATCTCCGGTAAATCATGCTCTGGTACCT 1400
 AGCTGCTATTGGAGCTGCTGTTGGCTGACCAGATGGCTGGTTGGTAGACATTGATGGGGATGGAGTTT 1470
 ATCATGAATGTTCAAGAGTTGGCTACGATTAGGGTAGAGAATCTCCGGTAAATCATGCTCTGGACAA 1540
 ATCAACATTAGGTATGGTTGTCATAAGGAAGATCGATTACAAAGCTAACCGGGCACATACATACCT 1610
 CGGGAAATCCTTCCAATTTCGGAAATCTCCGGATATGCTCAAAATTGCTGAAGCATGTGATATACCA 1780
 GCAGCCCCGGTGTACCAAGGTGAGCGATTAAAGGGCTGCAATTCAACAAATGTTGGATACTCCAGGACCGT 1850
 ATCTGGGATGTAATGTTACCAACATCAGGACATGTGCTGGCTATGATCCCTAGGGTGCCTCAA 1920
 GGACACCATAACAGAGGGTATGGAA 1966

Figure 1A

SSSSQSPKPKPAPSATITQSPSSLTDDKPSFVSRESPEEPRKGCDVILIVEALEREGVTDVFAYPGGASMEIHQAIITRS
NIIRNVLPRHEQQGVFAAEQGYARATGRVGVCIAATSGPGATNLVSGGLADALLDSPVPLVAAITGQVPRERMIGTDAFQETP
IYEVTRSIKHNLYLVDVEDIPRIYKEAFFLANSGRGPVLIDIPKDIQQQLUVPNWEQPIKLGGYLRLPKPTYSA
NEEGLLDQIVRVLVGESEKRPVLYTGGGLNSSEELRKFEILTGIPVASTLMGLCAFPCDDLSLHMLGMHCTYYANYA
VDKADELLAFLGVRFDERVTGKLEAFASRAKIVHIDSAEIGKNKQPHYSICGDVKVALQGLNKILESRKGKYKLDF
SNWREELNEOKKKFPLSEKTFGDAIIPPOYAIIQVLDLTGDAVVSTGVCOHQMWAAQFYKYRNPRQMLTSGGLGANG
FGLPAATGAAVARPAVVVDIDGDSFIMNNYQELATIRVENLPVKIMILLNNQHIGMVVQWEDRFYKANRAHTYLG
PSNSSEIFPDMLKFAEACDIPAARVTKVSDLRAAIQTMLDTPGPYLLDVTPHQEVLPNIPSGAAMFKDTITEGDG

Figure 1B

Figure 2A

SSSSSQSPKPKPPSATITQSPSSSLTDDKPSSFVSRFSPEEPRKGCDVLTVEALEREGVTDVFAYPGGASMEIHOALT
SNIIRNVLPRLRHEQQGVFAAEYARATGRYGVCIATSGPGATNLVSGLADALLDSVPLIVAITGQVPRRMIGTDAFQET
PIVEVTRSIKHNLYLVLDVEDIPRIVKEAFFFLANSRGPGPVLDIPKDIQQQLVYVPNWEQPIRKLGGLSRLPKPTYS
ANEEGLLDQIVRLVGESESKRPVLYTGGCLNSSEEERKFKVELTGPVASTLMLGIAFPCTDCISLHMLGMHGTVYANY
AVDKADLLAFCVRFFDRVTGKLEAFASRAKIVHIDSAEIGKNKOPHVSICGDVKVALQGLNKLIESRKKGKVRLD
FSNWREELNEQKKKFPLSFKTEFGDAIFPOYAIQWLDELTKGDAVSTGVGOHQHOMAAQFYKYRNPROWLTSGGLGAM
PSNSSEIFPDMLKFAEAACDIPAARVTKVSDLRAAIQTMLDTPGPYLLDVIVPHQEHVLPMIIPSGAAFKDTITEGDR
RAY

Figure 2B

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Figure 3

R11-AMACH S-AMACH	SSSSQSPKPKPPSATITOSPSSLTDKPKSSFVSRSFSEEPRKGCDVLVEA 101 SSSSQSPKPKPPSATITOSPSSLTDKPKSSFVSRSFSEEPRKGCDVLVEA 101
R11-AMACH S-AMACH	LEREQVTDVFAYPGGASMEIHOALTRSNIIIRNVLPREEQGGVFAAEGYAR 151 LEREQVTDVFAYPGGASMEIHOALTRSNIIIRNVLPREEQGGVFAAEGYAR 151
R11-AMACH S-AMACH	ATGRVGVCIATSGPGATNLVSGLADALLDSVPLVAITGQVPRRMIGTDAF 201 ATGRVGVCIATSGPGATNLVSGLADALLDSVPLVAITGQVPRRMIGTDAF 201
R11-AMACH S-AMACH	QETPIVEVTRSITKHNYLVLDVEDIPRIVEKAFFFLANSGRGPVLDIPK 251 QETPIVEVTRSITKHNYLVLDVEDIPRIVEKAFFFLANSGRGPVLDIPK 251
R11-AMACH S-AMACH	DIOQQOLVVNPWEQPIKLGYYLSRLPKPTYSANEEGLIDQIVRLVGE SKRP 301 DIOQQOLVVNPWEQPIKLGYYLSRLPKPTYSANEEGLIDQIVRLVGE SKRP 301
R11-AMACH S-AMACH	VLYTGGCLNSSEELRKFVELTGIPVASTLMLGLGAFPCDDLSLHMLGMH 351 VLYTGGCLNSSEELRKFVELTGIPVASTLMLGLGAFPCDDLSLHMLGMH 351
R11-AMACH S-AMACH	GTYYANYAVDKADLLA[GVRFDERVTG]LEAFASRAKIVHIDDSAEG 401 GTYYANYAVDKADLLA[GVRFDRVTG]LEAFASRAKIVHIDDSAEG 401
R11-AMACH S-AMACH	RNKQPHVSICGDVKVALQGLNKKILESRKGKVLDENQKKFP 451 RNKQPHVSICGDVKVALQGLNKKILESRKGKVLDENQKKFP 451
R11-AMACH S-AMACH	LSFKTEGDAIPQYAIQVLDELTRKGDAVSTGVQHOMWAQFYKYRNPR 501 LSFKTEGDAIPQYAIQVLDELTRKGDAVSTGVQHOMWAQFYKYRNPR 501
R11-AMACH S-AMACH	QWLTSGGLGAMFGFLPAIAAGAavarPDAVVDIDDGDSFIMNVQELATIR 551 QWLTSGGLGAMFGFLPAIAAGAavarPDAVVDIDDGDSFIMNVQELATIR 551
R11-AMACH S-AMACH	VENLPVKIMLNNQHLMVYQWE DRFYKANRAHTYLGNPSNSSEIFPDML 601 VENLPVKIMLNNQHLMVYQWE DRFYKANRAHTYLGNPSNSSEIFPDML 601
R11-AMACH S-AMACH	KFAEACDIPAARVTKVSDLRAAIQTMLDTGPYLLDVTGPYLLDVTGPYLLPMIP 651 KFAEACDIPAARVTKVSDLRAAIQTMLDTGPYLLDVTGPYLLDVTGPYLLPMIP 651
R11-AMACH S-AMACH	SGAAFKDTITEGDGRRAY 669 SGAAFKDTITEGDGRRAY 669